



Methodology: Survey of Prison Inmates, 2016

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Introduction

In 2016, the Bureau of Justice Statistics (BJS) conducted the Survey of Prison Inmates (SPI), a national, wide-ranging survey of prisoners age 18 or older who were incarcerated in state or federal correctional facilities within the United States. SPI provides national statistics on prisoner characteristics across a variety of domains, such as current offense and sentence, incident characteristics, firearm possession and sources, criminal history, demographic and socioeconomic characteristics, family background, drug and alcohol use and treatment, mental and physical health and treatment, and facility programs and rules violations. SPI can also be used to track changes in these characteristics over time, describe special populations of prisoners, and identify policy-relevant changes in the state and federal prison populations. This report is a technical discussion of the survey methodology employed by BJS for the 2016 SPI.

Formerly the Survey of Inmates in State and Federal Correctional Facilities (SISFCF), this survey was renamed SPI with the 2016 implementation. The survey of state prisoners was first conducted in 1974 and thereafter in 1979, 1986, 1991, 1997, and 2004. The first survey of federal prisoners was conducted in 1991, along with the survey of state prisoners, and both have been conducted at the same time using the same questionnaire and administration since then.

RTI International served as BJS's data collection agent for the 2016 SPI under a cooperative agreement (Award no. 2011-MU-MU-K070). From January through October 2016, data were collected through face-to-face interviews with prisoners using computer-assisted personal interviewing (CAPI). In a CAPI interview, interviewers read questions aloud and enter responses directly into a laptop computer, allowing skip patterns and other routing criteria to be implemented automatically. SPI interviews averaged approximately 50 minutes, including about 2 minutes

for the consent process and 48 minutes to complete the survey. Interviews were conducted in English (94%) and Spanish (6%).

Universe

The target population for the 2016 SPI was all male and female prisoners age 18 or older who were held in a state prison or were serving a sentence to federal prison in the U.S. during 2016. (See *Terms and definitions*.) The sampling universe for the survey consisted of 2,001 unique prisons housing a total of 1,502,671 prisoners, including 1,400,363 male prisoners and 102,308 female prisoners ([table 1](#)). The 2016 SPI universe was based on the 2012 Census of State and Federal Correctional Facilities, which enumerated correctional facilities that held persons sentenced as an adult, including those 17 or younger who were sentenced as an adult. The census included both confinement and community-based facilities, but it excluded special facilities such as those operated by or holding exclusively for the U.S. military, Immigration and Customs Enforcement, the U.S. Marshals Service, and correctional authorities in Indian country.

After the completion of the 2012 census and prior to July 2014, when the SPI sample of prisons was selected, the census was updated to account for known changes in facilities. Supplemental information to update the census was collected from websites maintained by each state's department of corrections and the Federal Bureau of Prisons (BOP). The types of changes included—

- adjusting the population size of a facility to account for a planned change in population
- removing facilities that were planned to close by the time the survey was fielded
- adding new facilities that were known to be operating.

TABLE 1**Number of facilities and prisoners in the universe and sample for the Survey of Prison Inmates, by stratum, 2016**

	Total	Stratum				
		Texas	California	Florida	All other 47 states	Federal
SPI universe						
Facilities ^a						
Male	1,791	140	76	137	1,263	175
Female	467	39	14	25	368	21
Prisoners						
Male	1,400,363	146,420	122,529	94,138	857,498	179,778
Female	102,308	12,616	6,880	7,021	64,202	11,589
SPI sample						
Stage 1 selection of facilities						
Facilities selected ^b						
Male	351	30	20	19	233	49
Female	114	4	3	3	92	12
Facilities fielded ^c						
Male	285	30	20	19	167	49
Female	100	4	3	3	78	12
Facilities that participated ^c						
Male	273	29	20	18	160	46
Female	91	4	2	3	70	12
Stage 2 selection of prisoners						
Prisoners selected						
Male	28,278	2,707	2,023	2,969	15,249	5,330
Female	8,780	368	184	433	6,415	1,380
Prisoners interviewed						
Male	18,546	1,924	1,227	1,142	10,535	3,722
Female	6,302	253	119	126	4,738	1,062

^aConsists of 2,001 unique facilities, including 257 co-ed facilities. Co-ed facilities are included in both male and female rows.

^b“Total” and “All other 47 states” include five co-ed facilities in which both male and female portions of the facility were selected. Both male and female rows include these facilities.

^c“Total” and “All other 47 states” include four co-ed facilities in which both male and female portions of the facility were selected. Both male and female rows include these facilities.

Source: Bureau of Justice Statistics, Survey of Prison Inmates (SPI), 2016; and Census of State and Federal Correctional Facilities, 2012.

Sample design and selection

Sample design

The 2016 SPI sample was a stratified two-stage design in which state and federal prisons were selected in the first stage and prisoners within sampled facilities were selected in the second stage. The sampling population for SPI consisted of two frames:

- facilities that housed male prisoners
- facilities that housed female prisoners.

Facilities that housed a combination of male and female prisoners were listed on both frames. Within each frame, facilities were stratified based on jurisdiction (state or federal) and states housing 100,000 or more prisoners as of December 31, 2013, which included Texas, California, and Florida.¹ Facilities located in the other 47 states were placed in their own stratum. The SPI sample was designed for states housing 100,000 or more prisoners as of December 31, 2013, to be self-representing, which meant the sample of prisoners selected was large enough to be representative of the state's prison population and could be used to produce state-level estimates.²

Selection of prisons

The 2016 SPI was designed to collect data from at least 350 participating facilities.³ An initial sample of 465 facilities—a 415-facility main sample and a 50-facility reserve sample—was selected for the survey. The main sample of 415 facilities assumed an 85% response rate and included—

- an initial main sample (random replicate) of 355 facilities at the start of the collection, given some uncertainty about the expected first-stage response rate. This included a 10-facility set-aside from oversampling federal prisons to ensure precision goals for federal estimates.

¹Based on population counts collected through the 2013 National Prisoner Statistics Program, which were the most recent population counts available at the time. See *Prisoners in 2013* (NCJ 247282, BJS web, September 2014).

²While the SPI sample was designed for states housing 100,000 or more prisoners to be self-representing (i.e., Texas, California, and Florida), during the SPI data collection this was not possible for Florida because access to prisoners in restrictive housing was not permitted. See *Weighting and non-response adjustments*.

³The facility (and prisoner) sample size was based on analysis (i.e., power analysis) that determined the sample size required to produce the same precision or better as was obtained in the 2004 Survey of Inmates in State and Federal Correctional Facilities, or a relative standard error of 10% or less.

- an additional sample (random replicate) of 60 facilities with a random subsample of 30 facilities selected after data collection began. This subsample, which was based on projected refusal and ineligibility rates calculated during the first half of data collection, ensured that the target number of facilities and interviews would be obtained.

Because of uncertainty about the first-stage response rate prior to the start of data collection, the main sample was separated into three unequal replicates (initial replicate of 355 facilities plus two subsample replicates of 30 facilities each). This design was implemented to ensure the SPI goals of sample size and precision would be achieved, while containing costs. Due to a first-stage response rate that was higher than originally assumed, it was not necessary to conduct interviews in the third replicate (remaining random subsample of 30 facilities), leaving a total of 385 prisons where interviews were expected to be conducted.

The 50-facility reserve sample included state prisons where interviews would be conducted only if the first-stage response rate dropped below 85%.⁴ However, the response rate did not fall below 85%, so the reserve sample of facilities was not used.

Prior to selection, the sample of prisons was allocated across five strata per frame in a multi-step process. (See table 1.) First, a size measure was developed for each facility. Given the frame, the base size measure of each facility was the number of male or female prisoners housed in the facility. The facility-size measure was increased by a factor of 3.5 for female state facilities and 2.4 for female federal facilities to ensure that enough females were sampled to generate reliable national estimates for this subpopulation.⁵ The facility size measure was further increased by a factor of three for facilities whose primary function was to provide mental health services, to ensure this subpopulation of prisoners was represented in national estimates. Second, the sample was allocated across the two frames proportionally, based on the sum of the facility-size measures. Third, within each frame, the sample of prisons was allocated across strata proportionally, based on the total size measure within each stratum. Among the self-representing state

⁴This reserve sample excluded state prisons in the three self-representing states to avoid additional burden given the sizes of the main samples in these states. They were also excluded based on the assumption that participation in the survey would be decided at the state level rather than the facility level.

⁵The oversampling factors were based on analysis (i.e., power analysis) that determined the sample size required to produce the same precision or better as was obtained in the 2004 Survey of Inmates in State and Federal Correctional Facilities, or a relative standard error of 10% or less.

strata, if the proportional allocation yielded an expected sample size of confinement facilities greater than 30% of confinement facilities in that state, then the number of selected confinement facilities in that jurisdiction was capped at 30%. This design feature was implemented to reduce burden and maximize response in the self-representing states. Also, the 10-facility oversample of federal facilities was proportionately allocated across the federal stratum in this step.

The sampling process of prisons included four distinct steps. First, self-representing prisons (facilities with an expected selection rate greater than one) were automatically selected, and the within-stratum sample size was reduced accordingly. Second, the main sample (the initial replicate of facilities and the subsample replicate) and reserve sample of facilities were initially selected simultaneously as one sample with probability proportionate to their size (PPS), based on the facility population. During this step, within each stratum, facilities were implicitly stratified by facility type (confinement or community-based) and whether the facility's primary function was to provide mental health services. Within each stratum, except the three self-representing state strata, facilities were also implicitly stratified by U.S. Census region and state. Third, to maintain the properties of a PPS sample, the reserve sample was selected via systematic sampling from the sample of facilities selected in the second step. Prior to selecting the systematic reserve sample, prisons were sorted by the sex housed, population size, facility type, and facility operator (public or private). Fourth, among the 415 main sample facilities (selected in steps 1 and 2), a random subset of 385 prisons (the initial replicate of 355 facilities plus the subsample replicate of 30 facilities) was selected in the same manner as the reserve sample and used to conduct the SPI interviews.

Selection of prisoners

Prisoners eligible to participate in the SPI were restricted to those age 18 or older. The SPI was designed to be self-weighting within each stratum. That means that if a constant number of prisoners per facility was selected and non-response was equal across all facilities in the stratum, then all prisoners in the stratum would have the same probability of selection, regardless of the size of the facility. This type of design minimizes the variance of national estimates. Based on this design, within the first stage of selection, each sampled prison had a fixed respondent target sample size of 64 within a state prison and 80 within a federal prison. Within each prison, a response rate of 70% was assumed, yielding a starting sample size of 92 prisoners in state facilities and 115 prisoners in federal facilities.

The SPI design allowed for two exceptions to the within-facility sample size. The first exception to this sample size occurred when the target sample size exceeded 75% of a facility's total population. Given the burden that would have been placed on the facility when this occurred, the sample size was set at 75% of the facility population. The second exception occurred when the actual population of a facility differed from the population on the frame (provided by the 2012 census) by 20% or more. While this scenario rarely occurred, the within-facility sample size was adjusted to compensate for the resulting weights that would differ from other facilities within the same stratum. This was done because the 2016 SPI was designed to be as close to self-weighting as possible, which meant selecting a constant number of prisoners per facility. To balance the need to maintain constant workloads across facilities, within-facility sample sizes were capped at 80 completed interviews in state facilities and 100 completed interviews in federal facilities (i.e., a 25% increase in the target number of respondents) when the facility was larger than expected. If the facility was smaller than expected, then the number of completed interviews was capped at 50 in state facilities and 64 in federal facilities (i.e., about a 20% decrease in the target number of respondents).

In the second stage of selection, prisoners were sampled differently depending on whether the facility was state or federal. Given the variety of prisoners within state facilities, prisoners were selected via a simple random sample. Within federal facilities, prisoners were first stratified by their offense type (drug offense or non-drug offense, because almost half of all federal prisoners were serving a sentence for a drug offense).⁶ Then within each of the two strata, a simple random sample of prisoners was selected. Federal prisoners in the non-drug-offense stratum were oversampled by a factor of 1.5 to ensure a large enough sample was selected to produce valid estimates within this subpopulation. For example, if 30% of a facility's population consisted of prisoners with a non-drug offense, 45% of the sample would be prisoners with a non-drug offense.

Sample size and response rate

The survey was conducted in 364 prisons (306 state and 58 federal prisons) out of the 385 selected for the interviewing (324 state and 61 federal) (table 2). The other 21 prisons were not included, either due to non-response or ineligibility. The response rate among selected prisons was 98.4%: 98.1% among state prisons

⁶See *Prisoners in 2013* (NCJ 247282, BJS web, September 2014), which was the most recent report on prisoners at the time the SPI sample was designed.

TABLE 2**Number of facilities and prisoners sampled in the Survey of Prison Inmates, by outcome and jurisdiction, 2016**

	Total		State		Federal	
	Number	Percent	Number	Percent	Number	Percent
Number of facilities sampled	385	:	324	:	61	:
Ineligible	15	:	12	:	3	:
Eligible	370	100%	312	100%	58	100%
Participated	364	98.4	306	98.1	58	100
Refused	6	1.6	6	1.9	0	0.0
Number of prisoners sampled	37,058	:	30,348	:	6,710	:
Ineligible	1,549	:	1,414	:	135	:
Eligible	35,509	100%	28,934	100%	6,575	100%
Participated	24,848	70.0	20,064	69.3	4,784	72.8
Refused ^a	9,310	26.2	7,755	26.8	1,555	23.7
Other not interviewed ^b	1,351	3.8	1,115	3.9	236	3.6

:Not calculated.

^aTotal includes 6,934 state and federal prisoners who refused to participate and 2,376 who the facility would not permit to be interviewed.

^bIncludes prisoners who were unable to be interviewed for various reasons, including those who left the facility after data collection began; were in restrictive housing for non-medical reasons; stopped the interview shortly after it started; were off facility grounds/at another facility; were in the hospital/medical ward; did not speak English or Spanish; or were unavailable because of work assignments, participation in programs, or other reasons.

Source: Bureau of Justice Statistics, Survey of Prison Inmates, 2016.

TABLE 3**Number of prisoners not interviewed in the Survey of Prison Inmates, by type of non-interview and jurisdiction, 2016**

	Total		State		Federal	
	Number	Percent	Number	Percent	Number	Percent
Total number of prisoner non-interviews	10,661	100%	8,870	100%	1,791	100%
Refused interview	9,310	87.3%	7,755	87.4%	1,555	86.8%
Facility refusals	2,376	22.3	2,305	26.0	71	4.0
Prisoner too violent	55	0.5	50	0.6	5	0.3
Prisoner held for other authorities	9	0.1	9	0.1	0	0.0
Refusal by facility prior to sampling ^a	2,195	20.6	2,154	24.3	41	2.3
Other refusal by facility	117	1.1	92	1.0	25	1.4
Prisoner refusals	6,934	65.0	5,450	61.4	1,484	82.9
Refused to come to interviewing room	1,220	11.4	1,108	12.5	112	6.3
Talked to interviewer but refused to participate	5,714	53.6	4,342	49.0	1,372	76.6
Other not interviewed^b	1,351	12.7%	1,115	12.6%	236	13.2%

^aIncludes prisoners who the facility would not permit to be interviewed, which was determined prior to selecting the sample. The majority of this type of refusal resulted from one state where interviewers were not permitted access to prisoners who were not housed in the general population.

^bIncludes prisoners who were unable to be interviewed for various reasons, including those who left the facility after data collection began; were in restrictive housing for non-medical reasons; stopped the interview shortly after it started; were off facility grounds/at another facility; were in the hospital/medical ward; did not speak English or Spanish; or were unavailable because of work assignments, participation in programs, or other reasons.

Source: Bureau of Justice Statistics, Survey of Prison Inmates, 2016.

(all but 6 out of 312) and 100% among federal prisons. Twelve selected facilities were deemed ineligible for the SPI among state prisons, and three facilities were deemed ineligible among federal prisons. A facility was deemed ineligible if it either—

- housed fewer than 10 prisoners the previous night
- had closed since the 2012 census was conducted
- did not hold any prisoners of the sex sampled.

A total of 24,848 prisoners participated (20,064 state and 4,784 federal prisoners) in the 2016 SPI, based on a sample of 37,058 prisoners (30,348 state and 6,710 federal). The second-stage response rate (the response rate among selected prisoners) was 70.0%: 69.3% among state prisoners and 72.8% among federal prisoners. The 10,661 sampled prisoners who were eligible for the survey but did not participate included 6,934 prisoners who refused to participate, 2,376 who the facility would not permit to be interviewed, and 1,351 who were unable to participate for other reasons (table 3). Refusals by facilities included prisoners who were deemed by the facility to be a safety or security risk because they were too violent to be interviewed. This group also included prisoners to whom SPI interviewers were not permitted access because they were not housed in the general population. The majority of these were from one state. Another 1,549 sampled prisoners were deemed ineligible for the survey because they had left the facility prior to data collection (1,114) or could not complete the interview because they were mentally incapable (339), physically unable (93), or ineligible for other reasons (3) (not shown in tables).

Consent

As with prior iterations of the SPI, before the interview prisoners were informed verbally and in writing that their participation was voluntary and that all information provided would be held in confidence. The 2016 SPI was the first time BJS sought to link prisoners' self-reported data with their administrative records maintained by other government agencies. Therefore, it was the first time BJS requested consent from prisoners to do such linking, involving criminal history, employment, income, and beneficiary records from participation in government programs. It was explained to prisoners that linkage to the record sources would take place for up to 5 years after data collection was completed. The request for record linkage was combined with the survey request, and together these requests were administered to prisoners through a single informed consent protocol.

Full-study participation in the 2016 SPI consisted of consent provided by prisoners to participate in the survey and all data linkage for the record sources described for up to 5 years after data collection. Prisoners who initially refused or expressed concerns about full-study participation were able to opt out of the full-study request in favor of partial-study participation. Partial-study participation consisted of consent provided by prisoners to participate in the survey and to linking their self-reported data to their existing criminal records only to supplement the data collected through the 2016 SPI. Prisoners who consented to partial-study participation did not provide consent to link their self-reported SPI data to any other record sources or their future (i.e., up to 5 years after data collection) criminal-history records.

TABLE 4

Consent rates among prisoners who participated in the Survey of Prison Inmates, by type and jurisdiction, 2016

	Total		State		Federal	
	Number	Percent	Number	Percent	Number	Percent
Number of respondents	24,848	100%	20,064	100%	4,784	100%
Full-study consent ^a	24,678	99.3	19,910	99.2	4,768	99.7
Partial-study consent ^b	170	0.7	154	0.8	16	0.3

^aIncludes prisoners who provided consent to participate in the 2016 SPI survey and all data linkage for the record sources described to them during the informed consent protocol for up to 5 years after data collection.

^bIncludes prisoners who provided consent to participate in the 2016 SPI survey and to linking their self-reported SPI data to their existing criminal histories records only. These prisoners did not provide consent to link their self-reported SPI data to their future (i.e., up to 5 years after data collection) criminal-history records or any other record sources described to them during the informed consent protocol.

Source: Bureau of Justice Statistics, Survey of Prison Inmates (SPI), 2016.

Nearly all prisoners (more than 99%) who agreed to participate in the 2016 SPI consented to the full study (the survey and all administrative data linkage), while less than 1% (0.7%) provided partial-study consent (table 4). Full-study consent rates were similar across state (99.2%) and federal (99.7%) prisoners.

Analysis for non-response bias

An analysis for non-response bias was conducted because the response rate in the 2016 SPI was below the 80% threshold identified by the Office of Management and Budget in its 2006 guidelines for federal statistical surveys.⁷ Bias arises when subjects with characteristics associated with the outcome of interest are either overrepresented or underrepresented, resulting in the estimated prevalence of an outcome that is different from the actual prevalence of the outcome. Because not all prisoners sampled responded to the survey, respondents could have differed from non-respondents in significant ways. To assess the potential bias in the 2016 SPI, the analysis consisted of two components:

- a comparison of respondents to non-respondents by prisoner characteristics
- a comparison of weighted estimates pre- and post-adjustment for non-response.

For the comparison of respondents to non-respondents by prisoner characteristics, Cohen's Effect sizes were used as the barometer for potential bias. When prisoner rosters were obtained for facility-level sampling, the following information was provided for all prisoners:

- sex
- age or date-of-birth
- race and Hispanic origin
- date of admission to prison for current offense (converted to time since admission)
- sentence length
- drug or non-drug offense (federal facilities only).

The analysis was conducted on eight groups of prisoners based on jurisdiction (state or federal), state (if applicable), and sex: state males (all states combined), state females (all states combined), federal males, federal females, Texas males, Texas females, California males,

and California females.⁸ The analysis was conducted in this manner because the 2016 SPI sample was designed to produce reliable estimates of prisoners among these key groups. These categories also made it easier to account for differences in how race and Hispanic origin were defined across jurisdictions. For this reason, race and Hispanic origin were not included in the non-response bias analysis for the "state males (all states combined)" and "state females (all states combined)" groups. In all eight groups, for each characteristic, the Cohen's Effect size was considered "small" (less than 0.2), indicating little potential for bias.

To compare weighted estimates pre- and post-non-response adjustment to determine if they were similar, estimates for a selected set of outcomes were computed using the design-based weights and non-response-adjusted weights (pre-post-stratification weights). (See *Weighting and non-response adjustments*.) Generally, if a change of less than five percentage points (depending on the sizes of the estimates) or a relative change of 20% or less between estimates was determined, then estimates were deemed to be similar. If the two estimates were similar, then it was assumed that the differential non-response did not introduce bias into the estimates for the characteristics included in the adjustment process. However, if the pre- and post-estimates were different, then it was assumed that the differential non-response across characteristics did impact estimates, indicating potential bias (which was corrected for in the non-response adjustment). (See *Weighting and non-response adjustments*.) For this analysis, the same eight groups of prisoners were used as when conducting the comparison of respondents and non-respondents. Eleven survey outcomes were used in the comparison:

- age
- race and Hispanic origin
- marital status
- educational attainment
- citizenship
- military service
- controlling offense
- criminal justice status at time of arrest (none, on probation, on parole, or escaped from custody)

⁷U.S. Office of Management and Budget. (2006). Standards and Guidelines for Statistical Surveys. *Federal Register*, 71(184), 55, 522-55, 523. Retrieved from <https://www.gpo.gov/fdsys/pkg/FR-2006-09-22/pdf/06-8044.pdf>

⁸While the SPI sample was designed for states housing 100,000 or more prisoners to be self-representing (i.e., Texas, California, and Florida), during the SPI data collection this was not possible for Florida because access to prisoners in restrictive housing was not permitted. See *Weighting and non-response adjustments*.

- number of arrests in lifetime
- number of prior incarcerations
- homelessness in the year prior to arrest.

Across the 8 analysis groups and 11 outcomes, the pre- and post-adjusted estimates varied by approximately 1% or less. Based on the results of the non-response bias analysis, it was determined that a weight adjustment could properly correct for the small potential bias among respondents to the SPI.

Weighting and non-response adjustments

Responses from interviewed prisoners in the 2016 SPI were weighted to provide national and some subnational estimates (for the self-representing states of Texas and California). Each interviewed prisoner was assigned an initial weight corresponding to the inverse of the probability of selection within each sampled prison. A series of adjustment factors were applied to the initial weight to minimize potential bias due to non-response and to provide national and subnational estimates.

Bias could result if the non-respondents were different from the respondents (non-response bias) or if the sampling population (the frame) did not accurately represent the target population (coverage bias). To compensate for these two possibilities, non-response and post-stratification adjustments were made.

Some facilities in a few states restricted the second-stage sampling population to exclude prisoners held in restrictive housing.⁹ To correct for this potential coverage error, two approaches were implemented. First, the sample size in these facilities was increased proportionally to achieve the target number of interviews per facility, while accounting for the prisoners in restrictive housing who were not permitted to be sampled and thereby could not be interviewed. Second, the weights for prisoners held in restrictive housing who were permitted to be sampled but refused to participate were increased to account for prisoners in restrictive housing who were not permitted to be sampled, as the latter were also non-respondents. This adjustment was implemented separately and prior to the traditional non-response adjustment, because it was assumed that non-respondents in restrictive housing were more similar to each other than to other types of prisoners.

⁹This included all sampled facilities in Florida, one of three states designed to be self-representing in the 2016 SPI sample. As a result of this restriction, it is no longer self-representing in the final sample, and state-level estimates cannot be produced.

The second adjustment involved calibration of the weights so that the weights for responding prisoners were increased to account for non-responding prisoners with similar characteristics, including distributions by age, sex, race, Hispanic origin, time served since admission, and sentence length. This adjustment ensured that the estimates accurately reflected the full sample rather than only the prisoners who responded. This adjustment was applied within each state and at the federal level to minimize definitional differences in the administrative characteristics.

The last adjustment involved calibration of the weights to correct for coverage error in the sampling frame relative to the total prisoner population during the survey reference period. The frame used for sampling may not have accurately reflected the target population because it did not include all facilities, was out of date, or categorized prisoners incorrectly. This adjustment ensured that the weighted population accurately reflected the target population (all prisoners age 18 or older who were held in a state prison or were serving a sentence to federal prison in the U.S. during 2016).¹⁰

For state and federal prisoners, calibration totals were based on the year-end 2015 count of prisoners obtained from the National Prisoner Statistics Program by jurisdiction (state or federal), state (for Texas and California), and sex.¹¹ The totals for state prisoners were 1,159,136 male prisoners (139,446 in Texas and 122,374 in California) and 89,175 female prisoners (12,998 in Texas and 5,441 in California). These counts were then raked to the 2015 age distribution of state prisoners as reported in the National Corrections Reporting Program. For federal prisoners, the calibration totals were 162,683 male prisoners and 10,730 female prisoners. They were raked to the 2015 age distribution of federal prisoners as reported in the Federal Justice Statistics Program. These adjustments, based on a generalized exponential model developed by Folsom and Singh, were applied to the SPI respondents.¹²

¹⁰The target population for the 2016 SPI was slightly different from BJS's official measure of the state and federal prison populations reported on in its *Prisoners* series. Prisoners age 17 or younger were not eligible in the SPI. Federal detention centers, which hold unsentenced prisoners, and non-secure, privately operated community corrections centers were also not eligible in the SPI.

¹¹While the SPI sample was designed for states housing 100,000 or more prisoners to be self-representing (i.e., Texas, California, and Florida), during the SPI data collection this was not possible for Florida because access to prisoners in restrictive housing was not permitted. See *Weighting and non-response adjustments*.

¹²Folsom, Jr., R. E., & Singh, A. C. (2000). The generalized exponential model for sampling weight calibration for extreme values, nonresponse, and poststratification. *Proceedings of the Section on Survey Research Methods* (pp. 598–603). Alexandria, VA: American Statistical Association. Retrieved from http://www.asasrms.org/Proceedings/papers/2000_099.pdf

Terms and definitions

Community-based prison—a correctional facility where 50% or more of the prisoners are regularly permitted to leave while unaccompanied.

Confinement prison—a correctional facility where fewer than 50% of the prisoners are regularly permitted to leave while unaccompanied.

Correctional facility—in this report, limited to a prison administered by or for a state or the federal government that typically holds felons and offenders with sentences of more than one year. Sentence length may vary by state. Five states operate integrated systems that combine prisons and jails. In this report, *correctional facility* is a synonym for *prison*; see also *prison*. This report excludes other types of correctional facilities, such as local jails or detention centers, juvenile correctional facilities or detention centers, and those operated by or holding exclusively for the U.S. military, Immigration and Customs Enforcement, the U.S. Marshals Service, and correctional authorities in Indian country.

Prison—a type of correctional facility administered by or for a state or the federal government that typically holds felons and offenders with sentences of more than one year. Sentence length may vary by state. Five states operate integrated systems that combine prisons and jails. In this report, *prison* is a synonym for *correctional facility*; see also *correctional facility*.

Restrictive housing—a unit of a correctional facility where prisoners are separated from the general prison population for various reasons, including for protective custody; for classification, reclassification, or transfer to another facility or unit within a facility; as a sanction for violating a facility rule; to provide for special needs (e.g., medical or mental health); or to ensure the safety, security, or orderly operation of the facility. Restrictive housing typically involves limited interaction with other inmates, and other restrictions. See *Use of Restrictive Housing in U.S. Prisons and Jails, 2011-12* (NCJ 249209, BJS web, October 2015) for more information.



The Bureau of Justice Statistics of the U.S. Department of Justice is the principal federal agency responsible for measuring crime, criminal victimization, criminal offenders, victims of crime, correlates of crime, and the operation of criminal and civil justice systems at the federal, state, tribal, and local levels. BJS collects, analyzes, and disseminates reliable statistics on crime and justice systems in the United States, supports improvements to state and local criminal justice information systems, and participates with national and international organizations to develop and recommend national standards for justice statistics. Jeffrey H. Anderson is the director.

This report was written by Lauren Glaze of BJS. Marcus Berzofsky, Dr. P.H., RTI International, provided statistical input and review. Jennifer Bronson and Stephanie Mueller verified the report. Lauren Glaze was the BJS project manager for the 2016 Survey of Prison Inmates.

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